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(54) Title: METHOD FOR PREPARING A MODIFIED HOST CELL

(57) Abstract: The present invention relates to a method for preparation of a modified host cell which comprises the steps of (a) transfecting a host cell with at least one compound of interest to which a label is covalently coupled and (b) isolating the transfected host cell, wherein the label provides to the host cell a non-inheritable trait. Modified host cells according to the invention can be directly separated from the non-modified host cell. To this end use is made of labels, which can be monitored at the modified cells (such as fluorescent labels) and which enable separation of the modified and non-modified host cells by suitable means. In case of fluorescent labels use can be made of a Fluorescent Activated Cell Sorter. Suitable compounds of interest according to this invention are compounds, which enable to change permanently or transiently a metabolic property of the host cell. Examples of compounds are polynucleotides, proteins or metabolites. The host cells modified according to the present invention can be used for the production of proteins, metabolites and cell biomass.

INTERNATIONAL SEARCH REPORT

Interponal Application No PCT/EP2004/011615

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 CO7H21/00 C12N C12N15/65 According to International Patent Classification (IPC) or to both national classification and IPC B. FIELDS SEARCHED Minimum documentation searched (classification system followed by classification symbols) CO7H C12N IPC 7 Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, MEDLINE, WPI Data, PAJ, BIOSIS, EMBASE, CHEM ABS Data, SCISEARCH C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Category ° JOHNSON A L ET AL: "A method to monitor 1-26 Χ DNA transfer during transfection." AAPS PHARMSCI, vol. 1, no. 2, 1999, page E6, XP002268416 ISSN: 1522-1059 abstract; figure 10 page 4, column 1, paragraph 2 - page 5, column 1, paragraph 2 US 6 608 213 B1 (OKAHATA YOSHIO ET AL) X 1-26 19 August 2003 (2003-08-19) abstract; claims 7,8 column 7, line 44 - column 8, line 3; figure 10 US 6 262 252 B1 (WOLFF JON A ET AL) 1-26 X 17 July 2001 (2001-07-17) example 11 Patent family members are listed in annex. Further documents are listed in the continuation of box C. Special categories of cited documents: "T" later document published after the International filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not cited to understand the principle or theory underlying the considered to be of particular relevance Invention "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the "O" document referring to an oral disclosure, use, exhibition or document is combined with one or more other such doouments, such combination being obvious to a person skilled in the aut. "P" document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of mailing of the international search report Date of the actual completion of the international search 7 April 2005 20/04/2005 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Vandenbogaerde, A Fax: (+31-70) 340-3016

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